

Amendment to the Claims:

This listing of claims replaces all prior versions, and listings, of claims in the application:

Kindly cancel claim 1 and substitute the following new claims therefor:

1. (Cancelled)

2. (New) A method of pumping a fluid, comprising causing a laminar outward flow in a fluid between a first rotating element and a second element, and directing the flow along grooves in the second element to pump the fluid along the grooves.

3. (New) A method as in claim 2, wherein said grooves on said second element are formed on inner surfaces of the second element, and are tilted in a direction of desired pumping.

4. (New) A method as in claim 2, wherein said directing a laminar flow comprises forcing flow from the first element into grooves on the inner surface of the second element.

5. (New) A method as in claim 4, further comprising increasing a force of pumping by increasing a speed of rotation of said first element.

6. (New) A method as in claim 4, further comprising spacing the first rotating element from the second rotating element by an amount that prevents substantial leakage between said grooves.

7. (New) A method as in claim 6, wherein said first rotating element has an outer surface which is substantially smooth and free of blades.

8. (New) A method as in claim 6, wherein said first rotating element has an outer surface which has a substantially constant diameter at all locations thereof.

9. (New) A method as in claim 2, further comprising bending the first rotating element and the second rotating element.

10. (New) A method as in claim 2, wherein said fluid is blood.

11. (New) A method as in claim 2, wherein said method is used for propulsion.

12. (New) A method of forming a blade less pump, comprising:

locating a first rotatable element within a second housing element, where the first rotatable element is formed without blades thereon, and the second housing element has inner surfaces defining a plurality of grooves, each of said grooves having a deeper portion which is further spaced from said first rotatable element and a less deep portion which is less spaced from said first rotatable element, and said grooves pointing in a specified direction; and

providing a rotating element for said first rotatable element which, when rotated, forces fluid in a direction.

13. (New) A method as in claim 12, wherein said providing a rotating element comprises attaching an element to an end of said first rotatable element.

14. (New) A method as in claim 12, wherein said providing a rotating element comprises forming a magnetic field to induce said first rotatable element to rotate.

15. (New) A method as in claim 12, further comprising setting a depth between said deeper portion and said less deep portion as proportional to a diameter of said first rotatable element.

16. (New) A method as in claim 12, wherein said locating a first rotatable element comprises locating an element which is substantially smooth on its outer surface.

17. (New) A method as in claim 12, wherein said rotatable element has bumps on its outer surfaces.

18. (New) A method, comprising:
introducing a fluid into an area of a central shaft that is formed without blades thereon, and an outer housing portion which includes grooves therein that are tilted in a specified direction; and
rotating said central shaft to force said fluid into said grooves and thereby pump said fluid.

19. (New) A method as in claim 18, wherein said rotating comprises attaching a rotating device to said central shaft.

20. (New) A method as in claim 18, wherein said rotating comprises magnetically rotating said central shaft.

21. (New) A method as in claim 18, further comprising bending at least a portion of said central shaft.

22. (New) A method as in claim 18, wherein said fluid is blood.

23. (New) A method as in claim 22, wherein said rotating causes a stagnation region within said blood.

24. (New) A method as in claim 18, wherein said central shaft and said outer housing portion include at least one area where minimal leakage between the grooves is allowed.

25. (New) A method as in claim 18, wherein said central shaft has a substantially constant outer diameter.

26. (New) A system, comprising:

a first bladder pump, comprising a central shaft rotating in a first direction within an outer housing that includes inner grooves thereon, forcing fluid through said outer housing in a force direction when said central shaft is rotated in said first direction; and

a second blade less pump assembly, located facing in a same direction as said first bladeless pump and comprising a central shaft, without blades, rotating in a second direction opposite to said first direction within an outer housing that includes inner grooves thereon, forcing fluid through said outer housing in said force direction when said central shaft is rotated in said second direction.

27. (New) A system as in claim 26, wherein said central shaft of said first assembly and said central staff of said second assembly are each substantially smooth outer surfaces.